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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,892	01/28/2002	Keishi Kimura	111798	2059

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EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,892

Applicant(s)

KIMURA, KEISHI

Examiner

BRIAN P. YENKE

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Response (07 Dec 04).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-13 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The examiner is providing a new Non-Final rejection, based upon applicant's arguments regarding Arai not including an A/D after a frequency conversion.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al., US 5,812,210 in view of Binder, US 6,016,113.

In considering claims 1-3 and 7,

a) *the claimed a frequency characteristic adjustment module...* is met by frequency/resolution conversion circuit 11 (Fig 5, Fig 6) which can receive a plurality of video signals differing in scanning frequencies and resolution, where circuit 11 converts at least one of a scanning frequency and a horizontal resolution.

c) *the claimed an image display module...* is met by video circuit 2, deflection circuit 13 which provide the signal/control signals to CRT 4 for display.

d) *the claimed a filter unit that is capable for varying the frequency...* is met by conversion circuit 11 where timing control circuit 26 is able to vary the frequency of the circuits/filters, based upon the received signal

e) the claimed a display condition detection unit... is met where signal identification circuit 31 of conversion circuit 11 identifies the type of signal received via the horizontal and vertical sync signals (Fig 6), which is used by timing conversion circuit 11 to convert at least of the scanning frequency and resolution to be within a predetermined higher ranges and within receivable ranges of the display apparatus.

f) the claimed a filter control unit... is met by signal identification circuit 31, sync generation circuit 28 and the video memory circuit 22 which communicates with timing control circuit 26.

However, Arai does not explicitly disclose *b) the claimed an A/D conversion module*, though it is noted that Arai does disclose an A/D conversion circuit 21 (Fig 6).

The use of an A/D and/or D/A circuits are well known in the art, in order to convert a signal into a desirable format, based upon processing and system requirements. The use of an A/D which is performed after a frequency conversion (i.e. low pass filtering, noise removal) is conventional and thus the examiner incorporates Binder. Binder discloses a frequency adjustment (presampling filter 102) where the signal is then converted into a digital signal via 106.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Arai which discloses a frequency adjustment module being performed in the digital domain, by allowing the designer to perform the adjustment in the analog domain and then converting the signal into a digital signal (via an A/D) for further processing if necessary, as performed by Binder.

In considering claims 8-10,

Arai does not specifically disclose multiple filters and a selector which selects one of the filters.

As stated above in the rejection, Arai discloses a system which is able to convert the reception of multiple signals into a desired frequency/resolution which is then viewable to the user.

Although the use of hardware and/or software in implementing various frequency characteristics is conventional in the art, the examiner takes "OFFICIAL NOTICE" regarding a system which is able to select between filters which have different frequency characteristics (i.e. operated in hardware).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Arai and Binder, which discloses the reception of a variety of signals varying in frequency/resolution, which selects/activates the appropriate frequency of the circuits/filters via timing control circuit 26, by performing the selection/activation via a conventional selector/multiple filters, therefore providing the user the option of using readily available conventional hardware/logic.

In considering claims 11-13,

Arai does not specifically disclose a projector. Arai discloses a deflection circuit which is used to operate a video display apparatus via a CRT.

The use of a projector as a display device/apparatus is notoriously well-known in the art, where based upon the users viewing situation (size of room, number of people etc) would determines whether a projector is desirable.

Thus, the examiner takes "OFFICIAL NOTICE" regarding the use of a projector as a display system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Arai and Binder which discloses the reception of signals varying in frequency/resolution by providing the viewer the option of viewing the received signals a projector which would provide the user the ability to view the signals on a conventional/off-the shelf device.

Allowable Subject Matter

3. Claims 4-6 and 14 are objected to as being dependent upon a rejected base claim, but appear to be allowable over the prior art if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (571)272-7352.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

(703)305-HELP.

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800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and

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applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS).

PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly

available. EFS allows customers to electronically file patent application documents

securely via the Internet. EFS is a system for submitting new utility patent applications


and pre-grant publication submissions in electronic publication-ready form. EFS

includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic

submission package. EFS

also allows the submission of Computer Readable Format (CRF) sequence listings for

pending biotechnology patent applications, which were filed in paper form.


BRIAN P. YENKE
Primary Examiner
Art Unit 2614


B.P.Y.

31 May 2005